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AUTHOR Terrill, Marilyn J.
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ABSTRACT

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Assertion Training and Cognitive Restructuring with College Women

Marilyn J. Terrill*

Department of Educational Psychology, University of Illinois

*Currently at:
Great Plains Mental Health Center
Box 1209 - 701 East C Street
North Platte, Nebraska 69101

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Abstract

The process of assertive behavior change of college women who received assertion training (AT) and cognitive restructuring was examined to assess the relative effects of different durations of exposure to cognitive restructuring. Twenty-seven undergraduate and graduate women students at a state University volunteered and were screened for AT groups. Single subject methodology was utilized to plot the process of change in subjects' assertive behavior and situational discomfort when asserting themselves. Idiosyncratic individual patterns of situational discomfort and behavior changes suggest the need for research designs which focus on individual progress records rather than global group improvement.

Assertion Training and Cognitive Restructuring with College Women

Although numerous studies have compared the outcomes of a variety of assertion training procedures, no previous assertion training research has examined the process of assertive behavior change in a typical clinical setting. The purpose of this study was to examine the process changes in assertive behavior and situational discomfort of college women who were given assertion training (AT) that included presentation of a cognitive restructuring model in addition to behavioral practice. Lange and Jakubowski (1976) note that AT incorporates four procedures:

> (1) teaching people the differences between assertion and aggression and between nonassertion and politeness; (2) helping people identify and accept both their personal rights and the rights of others; (3) reducing existing cognitive and affective obstacles to acting assertively, e.g., irrational thinking, excessive anxiety, guilt, and anger; and (4) developing assertive skills through active practice methods. (p. 2)

A variety of techniques have been suggested to help disinhibit trainees and remove internal blocks (number three above) to asserting themselves, e.g., therapist exhortation and persuasion, systematic desensitization, training in progressive relaxation, emotive imagery, covert reinforcement, and identifying and replacing socialization messages (Goldstein & Wolpe, 1972; Jakubowski-Spector, 1973a, 1973b; Lange & Jakubowski, 1976). One of these methods, cognitive restructuring, involves helping nonassertive people examine their self-statements and teaching them (a) to identify catastrophic or irrational beliefs about asserting themselves, (b) to systematically challenge and dispute these maladaptive beliefs, (c) to replace anxiety-inducing self-statements with realistic, coping self-statements, and (d)

to notice the resulting decrease in subjectively felt discomfort, e.g., guilt, anxiety, rage, or depression (Ellis, 1973; Ellis & Harper, 1976; Goldfried, Decentenceo, & Weinberg, 1974). Cognitive restructuring (CR) has been found effective in changing a variety of maladaptive interpersonal and intrapersonal behaviors and in reducing subjects' level of emotional arousal (Meichenbaum, 1974, 1975; Meichenbaum & Cameron, 1973; Meichenbaum & Turk, 1976).

Women in particular have expressed a need for help in becoming assertive, and consequently, AT programs have been developed specifically for women. Women's sex role socialization and the women's movement are prevalent themes among authors' speculations regarding why women especially are seeking AT (Bloom, Coburn, & Pearlman, 1975; Jakubowski, 1977; Jakubowski-Spector, 1973a, 1973b; Johnson, 1975; Osborn & Harris, 1975; Phelps & Austin, 1975; Wolfe & Fodor, 1975). As women expand their expectations for themselves, their roles, and their career goals, they sometimes become aware of their lack of interpersonal skills.

Both Linehan and Goldfried (1975) and Wolfe (1975) compared the effectiveness of a cognitive-behavioral approach to AT with a behavior rehearsal approach using women as subjects. Both studies found the cognitive-behavioral approach to AT clearly promising, but not superior, to the behavioral approach in developing women's assertive behavior. Although these studies provided an important foundation for further examination of cognitive-behavioral AT, the ability to generalize from and clinically apply these two experiments to AT groups is limited. Both Linehan and Goldfried (1975) and Wolfe (1975) employed brief treatments in which trainees practiced and were

tested on a predetermined set of situations requiring assertion. The treatment time used, four to eight hours, may not have been sufficient time for trainees to practice and integrate CR techniques, as well as practice new assertive behaviors. In addition, traditional comparative studies employing pre-posttest designs provide little information about the mechanisms of assertive behavior change and about individual variations in the change process (Bergin & Strupp, 1970; Glass, Willson, & Gottman, 1975; Gottman, 1973). As Glass et al. noted, "Interventions into societies [as well as groups and individuals] do not have merely 'an effect' but 'an effect pattern' across time" (1975, p. 5). This study assessed the process of change of women's (a) role-played assertive responses, (b) reported in vivo assertive behavior, and (c) situational discomfort when asserting themselves. In order to maximize the practical applications of this research, these variables were examined in a context in which training was (a) conducted in a naturalistic group setting, (b) consisted of 16 hours of treatment, and (c) included cognitive and behavioral practice of situations from participants own lives. These variables were also compared for two treatment groups: (a) one that emphasized cognitive restructuring in the first treatment phase, followed by cognitive and behavioral practice in the second treatment phase; (b) another that emphasized behavioral practice in the first treatment phase, followed by cognitive restructuring and behavioral practice in the second treatment phase. It was expected that,

1. At the end of treatment, college women given AT beginning with cognitive restructuring would demonstrate significantly greater improvement on assertion and situational discomfort measures than women given AT beginning

with behavioral practice; and

2. At the end of the first treatment phase, college women given cognitive restructuring would reduce their situational discomfort but would not improve their assertive behavior significantly more than women given behavioral practice.

Method

Eighteen undergraduate and nine graduate women students who responded to local advertisements for AT groups for college women at the University of Illinois at Urbana-Champaign comprised the subject population. Subjects' ages ranged from 19 to 30 years with a mean of 22.3 years. Screening interviews were conducted to determine the appropriateness of AT for the women and to identify assertive goals for journal recording (to be described later). Because this research was intended to be naturalistic women functioning at different levels were included, e.g., women who (a) were pervasively nonassertive, (b) considered themselves aggressive and wanted to learn how to be appropriately assertive, and (c) were assertive in many situations but wanted to be more comfortably assertive.

Following screening interviews the 27 subjects were distributed randomly into one of three groups: (a) AT with emphasis on behavioral practice in the first treatment phase (sessions one and two) followed by cognitive restructuring and behavioral practice in the second treatment phase (B/CB) (n = 10); AT with emphasis on cognitive restructuring in the first treatment phase followed by behavioral and cognitive practice in the second treatment phase (C/BC) (n = 10); and (c) no treatment control (Control) (n = 7). Experimental groups met for seven weekly sessions lasting two and one-half hours each

conducted by the researcher, an experienced assertion trainer. The AT, as a whole, incorporated all four procedures mentioned previously by Lange and Jakubowski accomplished through leader mini-lectures; discussion; structured group, dyadic, and triadic exercises; bibliotherapy; weekly cognitive or behavioral homework assignments; and cognitive and behavior rehearsal with modeling and coaching by the trainer and group members.

Three simultaneous research designs were integrated in this study: (a) traditional group by treatment comparisons based on pre-mid-posttest measures; (b) group time-series comparisons based on weekly measures ("Multiple-Group--Multiple-I" design; Glass et al., 1975); and (c) single subject time-series case studies ("Single-Case--Multiple-I" designs; Glass et al., 1975).

The design and instrumentation for group pre-mid-posttest comparisons are shown in Table 1. Experimental and control groups' performance on pre-posttest measures were compared to see if AT was more effective than no treatment. Pre-posttreatment measures included the College Self Expression Scale (CSES) (Galassi, DeLo, Galassi, & Bastien, 1974), a self-report measure of assertion; the College Women's Assertion Sample (CWAS) (MacDonald, 1974, in press), a behavioral measure of assertion; the Subjective Units of Disturbance Scale (SUDS) (Wolpe, 1969), a self-report measure of situational discomfort obtained for each CWAS item; and an abbreviated version of the I-E Scale (IE) (Rotter, 1966), a self-report measure of locus of control. A Posttreatment Questionnaire also was administered to all subjects. Two experimental groups were also compared on two midtest measures at the end of the first treatment phase: a seven-item version of the CWAS (CWAS7) and of the SUDS (SUDS7).

Insert Table 1 about here

A "Multiple-Group--Multiple-I" time-series design was employed to examine the course of experimental subjects' assertive behavior and situational discomfort change. As shown in Table 2, repeated measures of experimental subjects' assertive behavior and situational discomfort were obtained from self-report assertion journals, a promising, yet underutilized technique in AT research. During screening interviews all subjects selected a target assertive goal. They began recording episodes related to their assertive goal approximately two weeks prior to the onset of AT to obtain pretreatment baseline data. Experimental subjects continued this recording throughout the course of AT. For each situation relevant to her target goal, the subject recorded (a) the date, (b) a description of the situation, (c) her SUDS score, (d) a description of her behavior, (e) her thoughts and feelings about asserting herself and how she dealt with these thoughts and feelings, and (f) what she would like to improve in her behavior. All journal entries were rated by the researcher and one of two trained raters on their (a) relevance to the subject's target assertive goal, and (b) level of assertive behavior (clearly nonassertive, borderline nonassertive, clearly assertive, borderline aggressive, and clearly aggressive). Inter-rater reliabilities were subsequently established. (Readers are referred to Terrill, 1978, for a detailed description of journal goals, rating criteria, and rater training procedures). Repeated measures of locus of control also were obtained; the IE was administered at each AT session.

Insert Table 2 about here

In addition, each experimental subject served as her own control in a "Single-Case--Multiple-I" time-series case study. The design for the single subject time-series parallels the group time-series presented in Table 2. Repeated measures of subjects' assertive behavior and situational discomfort (derived from assertion journals) provided progress records for each AT participant.

Group pre-posttest measures were analyzed using analysis of covariance and one-way analysis of variance. Repeated measures of assertion and SUDS ratings by each experimental group were analyzed with repeated measures analysis of variance. Time-series analyses were utilized to test for treatment effects on individual subjects' self-report assertive behavior and SUDS scores. The Glass et al. (1975) ARIMA model was selected for single subject analyses since it controls for autocorrelation of repeated observations. Single subject assertion or SUDS data that were not autocorrelated were analyzed using one-way analyses of variance. Finally, a correlation coefficient representing the slopes of the progress line for each treatment phase were computed for each subject.

Results

Pre-posttest comparisons between experimental and control groups indicated that experimental subjects responded significantly ($p < .05$) more assertively than control subjects on a behavioral role-play measure of assertion (CWAS). No significant differences were found between experimental and control groups' locus of control (IE) or situational discomfort (SUDS) when responding to CWAS items. Comparisons between experimental and control subjects' responses to the Posttreatment Questionnaire indicated that experimental

subjects responded significantly more positively to items referring to their (a) assertive behavior change ($p < .01$), (b) understanding of assertive problems ($p < .05$), (c) discomfort or anxiety when asserting themselves ($p < .01$), and (d) ability to apply what they learned to interpersonal situations not involving assertion ($p < .05$).

No significant differences were found between experimental groups' CWAS or SUDS scores at posttesting or their CWAS7 or SUDS7 scores at midtesting.

Comparisons of experimental groups based on repeated measures demonstrated that both groups significantly ($p < .01$) increased their assertive behavior in situations relevant to individually-identified goals (reported in assertion journals). No significant Group, Phase, or Group x Phase effects were obtained from repeated measures analysis of variance of SUDS ratings, also reported in subjects' assertion journals. In addition, neither experimental group demonstrated significant changes in locus of control repeated measures.

Case studies of experimental subjects' assertion journal data showed that two C/BC and five B/CB subjects significantly improved their assertive behavior. One C/BC and three B/CB subjects significantly decreased their situational discomfort in situations relevant to their target assertive journal goals. Patterns of change tended to be idiosyncratic rather than uniform from subject to subject. For example, subject 3 (see Figure 1) evidenced significant phase-to-phase discontinuity in her assertive behavior ($F = 13.00$, $df = 2/56$, $p < .01$) and significant change between Baseline (-.78) and Treatment_2 (-.14) means. The combination of (a) nonsignificant correlations (journal order by assertion rating) within the three phases (+.07, -.38, -.02, $p > .10$), (b) the highly significant difference between

her Treatment$_1$ and Treatment$_2$ means (F = 10.98, df = 1/56, $p < .01$), and (c) the lack of difference between Baseline and Treatment$_1$ (behavioral practice) means, indicates that there was a dramatic jump in her assertive behavior at Treatment$_2$ (cognitive restructuring and behavioral practice). Examination of subject 3's SUDS ratings indicated serial dependence among observations, hence her SUDS data were analyzed using ARIMA model 101 (Glass et al., 1975). Analysis indicated that her SUDS ratings decreased significantly and immediately at the beginning of Treatment$_1$ (behavioral practice) (t = -1.73, df = 57, $p < .05$) and again at the beginning of Treatment$_2$ (cognitive restructuring and behavioral practice) (t = -11.63, df = 41, $p < .05$). However, different patterns emerged for different women. Of the seven subjects who significantly improved their assertive behavior over the course of AT, two exhibited abrupt shifts in their assertive responding at the beginning of Treatment$_1$, three exhibited abrupt changes at the beginning of Treatment$_2$, one improved abruptly at the inceptions of both treatment phases, and one showed gradual, significant improvement throughout the Baseline phase. Of the four subjects who significantly reduced their situational discomfort when asserting themselves, two subjects' SUDS decreased abruptly at the beginning of Treatment$_1$, one subject's SUDS decreased at the beginning of Treatment$_2$, and another subject's discomfort decreased at the beginning of both treatment phases. Two of the subjects who significantly reduced their SUDS also significantly improved their assertive behavior over the course of AT.

Insert Figure 1 about here

Discussion

AT which began with cognitive restructuring and was followed by behavioral and cognitive practice (C/BC) was not more effective in improving college women's assertive behavior than AT which began with behavioral practice and was followed by cognitive restructuring and behavioral practice (B/CB). However, both treatment groups significantly improved their assertive behavior in situations relevant to their target assertive journal goals. Either condition was more effective than no treatment in improving college women's role-played assertive behavior (CWAS).

Cognitive-behavioral AT did not reduce college women's situational discomfort when responding to a behavioral role-play test compared to no treatment. Over the course of AT, neither experimental group significantly reduced their discomfort in situations relevant to their journal goals even though they reported they felt less uncomfortable than before AT. Mixed results have been reported in previous AT research on the effect of CR in reducing anxiety (Linehan & Goldfried, 1975; Thorpe, 1975; Wolfe, 1975). The relationship between assertion and discomfort or anxiety appears to vary with the methods of measurement employed (Kern & MacDonald, 1978). The combination of (a) lack of significant decreases in most experimental subjects' situational discomfort, and (b) subjects' Posttreatment Questionnaire reports that CR was very beneficial implies that emphasis on reduction of anxiety or discomfort may be misplaced. Introduction of CR as a method to help trainees assert themselves <u>even when they are anxious or uncomfortable</u> and to <u>prevent escalation of anxiety</u> may be a more accurate description of initial outcomes than reduction of unpleasant feelings. In the author's experience, large

SUDS decreases ensue for group members who diligently practice CR exercises. Some AT participants may expect "instant relief," and may need to be encouraged to apply CR principles *in vivo* whenever possible.

The most significant contribution of this research was its documentation of the value of examining the effects of therapy in individual subjects. Single subject analyses demonstrated the course of assertive behavior and situational discomfort change is not linear or gradual. Changes tended to occur at the beginning of a treatment phase, rather than gradually within a phase. However, these changes were highly idiosyncratic, occurring at the beginning of the first treatment phase for some individuals, at the second treatment phase for others, and not at all for others. Group analyses obscured these statistically reliable individual patterns. These findings suggest that research on AT, and other therapies as well, would benefit from focus on individual progress records rather than pre-posttest group comparisons.

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Table 1

Instrumentation for Pre-Mid-Posttreatment Group Comparisons

Group	Pretesting		$Treatment_1$	Midtesting	$Treatment_2$	Posttesting
	Before Interview	After Interview	Sessions 1 and 2		Sessions 3-7	
B/CB	CSES IE	CWAS + SUDS IE	Behavioral Practice Emphasis (B)	CWAS7 + SUDS7	Introduction to Cognitive Restructuring Model + Behavioral and Cognitive Practice (CB)	IE CSES Posttreatment Questionnaire CWAS + SUDS
C/BC	CSES IE	CWAS + SUDS IE	Introduction to Cognitive Restructuring Model (C)	CWAS7 + SUDS7	Behavioral and Cognitive Practice (BC)	IE CSES Posttreatment Questionnaire CWAS + SUDS
Control	CSES IE	CWAS + SUDS IE	_____	____	_____	IE CSES Control Group Posttreatment Questionnaire CWAS + SUDS

Table 2

"Multiple-Group--Multiple-I" Time-Series Design
for Experimental Groups

Pretreatment Baseline Phase Week 1	Treatment$_1$ Phase Weeks 2 and 3		Treatment$_2$ Phase Weeks 4, 5, 6, and 7			
B/CB Group	Behavioral Practice		Introduction to Cognitive Restructuring Model plus Behavioral and Cognitive Practice			
A SUDS IE	A SUDS IE	A SUDS IE	A SUDS IE	A SUDS IE	A SUDS IE	A SUDS IE
C/BC Group	Introduction to Cognitive Restructuring Model and Cognitive Practice		Behavioral and Cognitive Practice			
A SUDS IE	A SUDS IE	A SUDS IE	A SUDS IE	A SUDS IE	A SUDS IE	A SUDS IE

A = Assertion Ratings from Journals
SUDS = Subjective Units of Disturbance Scale
IE = Shortened version of the I-E (Internal-External) Scale

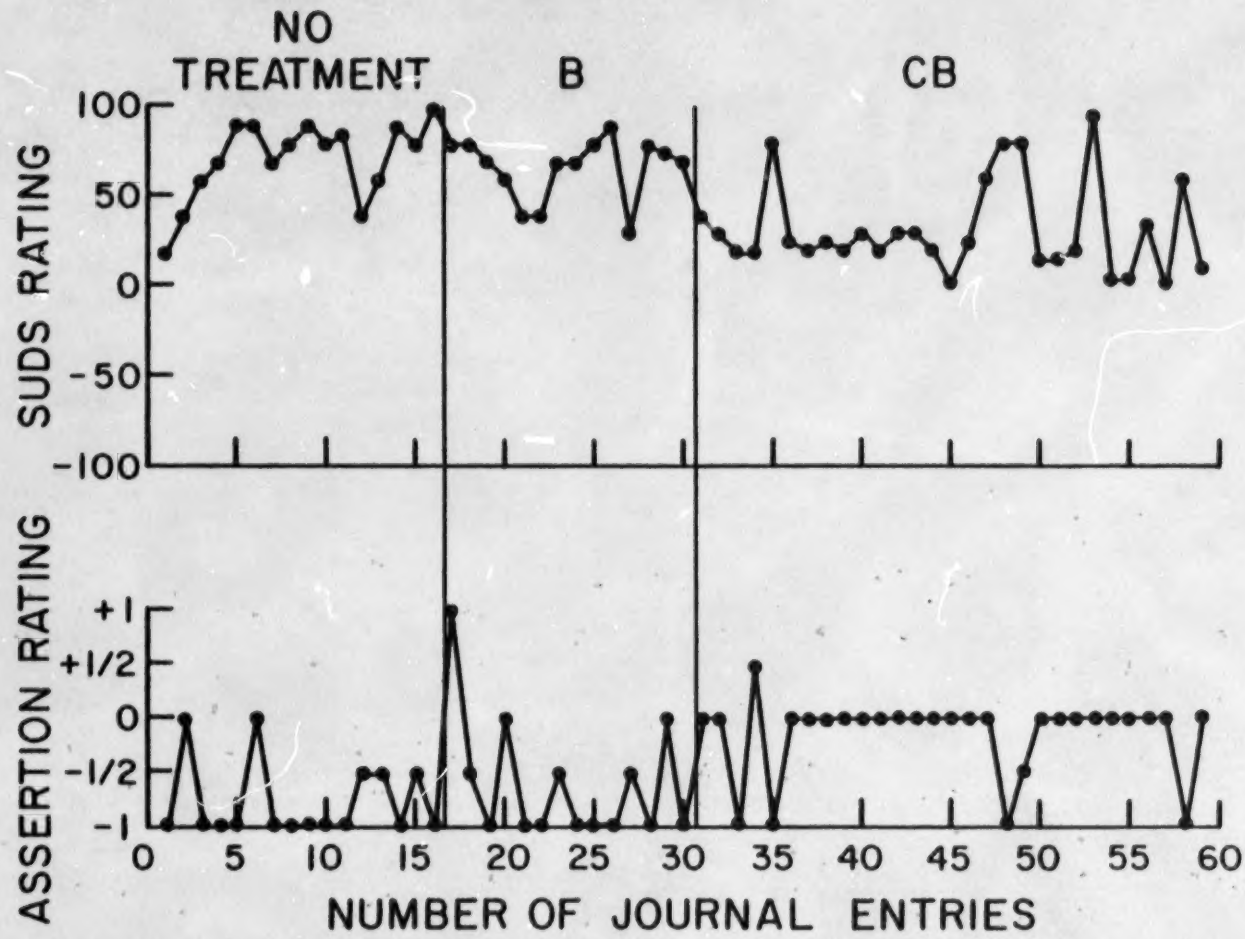

Figure 1. Subject 3: Assertion Ratings and Subjective Units of Disturbance Scale (SUDS) Ratings (B = behavioral practice; CB = cognitive restructuring and behavioral practice).
Assertion: +1 = Clearly Aggressive 0 = Clearly Assertive -1 = Clearly Nonassertive
SUDS: 100 = High Discomfort 0 = Absolute Calm -100 = Positive Excitation